



PATENT ABSTRACTS OF JAPAN

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ABE TAKAO****(54) METHOD FOR HEAT-TREATING SILICON
WAFFER AND SILICON WAFER****(57) Abstract:**

PROBLEM TO BE SOLVED: To provide a heat-treating method by which, particularly, the COP density and the occurrence of a micro defect which becomes the core of an oxidization-induced lamination defect can be reduced on the surface of a silicon wafer for heat-treating the silicon wafer in a reducing atmosphere by using a device which can quickly heat and cool the silicon wafer.

SOLUTION: In a method for heat-treating silicon wafer, a

silicon wafer is heat-treated in a reducing atmosphere by using a device which can quickly heat and cool the silicon wafer. During the course of the heat treatment, the silicon wafer is heat-treated for 1-60 seconds within a temperature range from 1,200°C to a temperature equal to or lower than the melting point of silicon. It is preferable to form the reducing atmosphere to a 100% hydrogen atmosphere or a mixed hydrogen-argon atmosphere and to adjust the heat-treating time to 1-30 seconds.

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